

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/820,339B
Source: 1FW/6
Date Processed by STIC: 12/13/05

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 12/13/2005

PATENT APPLICATION: US/09/820,339B

TIME: 14:01:37

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12132005\I820339B.raw

3 <110> APPLICANT: FUCHS, Sara
 4 BARCHAN, Dora
 5 SOUROUJON, Miriam C.
 7 <120> TITLE OF INVENTION: RECOMBINANT FRAGMENTS OF THE HUMAN ACETYLCHOLINE RECEPTOR
 AND
 8 THEIR USE FOR TREATMENT OF MYASTHENIA GRAVIS
 10 <130> FILE REFERENCE: FUCHS=2A
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/820,339B
 C--> 12 <141> CURRENT FILING DATE: 2001-03-29
 12 <150> PRIOR APPLICATION NUMBER: 09/423,398
 13 <151> PRIOR FILING DATE: 1999-11-08
 15 <150> PRIOR APPLICATION NUMBER: PCT/IL98/00211
 16 <151> PRIOR FILING DATE: 1998-05-06
 18 <160> NUMBER OF SEQ ID NOS: 32
 20 <170> SOFTWARE: PatentIn version 3.3
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 630
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Homo sapiens
 27 <400> SEQUENCE: 1
 28 tccgaacatg agaccgctct ggtggcaaag ctatttaaag actacagcag cgtggtgcgg 60
 30 ccagtggaag accaccgcca ggtcgtggag gtcacgctgg gcctgcagct gatacagctc 120
 32 atcaatgtgg atgaagtaaa tcagatcgtg acaaccaatg tgcgtctgaa acagcaatgg 180
 34 gtggattaca acctaaaatg gaatccagat gactatggcg gtgtgaaaaa aattcacatt 240
 36 ccttcagaaa agatctggcg cccagacctt gttctctata acgatgcaga tgggtgacttt 300
 38 gctattgtca agttcaccaa agtgctcctg cagtacactg gccacatcac gtggacacct 360
 40 ccagccatct ttaaaagcta ctgtgagatc atcgtcacc cttttccctt tgatgaacag 420
 42 aactgcagca tgaagctggg cacctggacc tacgacggct ctgtcgtggc catcaaccgg 480
 44 gaaagcgacc agccagacct gagcaacttc atggagagcg gggagtgggt gatcaaggag 540
 46 tcccggggct ggaagcactc cgtgacctat tcctgctgcc ccgacacccc ctacctggac 600
 48 atcacctacc attcgtcat gcagcgccctg 630
 51 <210> SEQ ID NO: 2
 52 <211> LENGTH: 210
 53 <212> TYPE: PRT
 54 <213> ORGANISM: Homo sapiens
 56 <400> SEQUENCE: 2
 58 Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe Lys Asp Tyr Ser
 59 1 5 10 15
 62 Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val Val Glu Val Thr
 63 20 25 30
 66 Val Gly Leu Gln Leu Ile Gln Leu Ile Asn Val Asp Glu Val Asn Gln
 67 35 40 45
 70 Ile Val Thr Thr Asn Val Arg Leu Lys Gln Gln Trp Val Asp Tyr Asn
 71 50 55 60

RAW SEQUENCE LISTING

DATE: 12/13/2005

PATENT APPLICATION: US/09/820,339B

TIME: 14:01:37

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12132005\I820339B.raw

```

74 Leu Lys Trp Asn Pro Asp Asp Tyr Gly Gly Val Lys Lys Ile His Ile
75 65              70              75              80
78 Pro Ser Glu Lys Ile Trp Arg Pro Asp Leu Val Leu Tyr Asn Asn Ala
79              85              90              95
82 Asp Gly Asp Phe Ala Ile Val Lys Phe Thr Lys Val Leu Leu Gln Tyr
83              100             105             110
86 Thr Gly His Ile Thr Trp Thr Pro Pro Ala Ile Phe Lys Ser Tyr Cys
87              115             120             125
90 Glu Ile Ile Val Thr His Phe Pro Phe Asp Glu Gln Asn Cys Ser Met
91              130             135             140
94 Lys Leu Gly Thr Trp Thr Tyr Asp Gly Ser Val Val Ala Ile Asn Pro
95 145              150             155             160
98 Glu Ser Asp Gln Pro Asp Leu Ser Asn Phe Met Glu Ser Gly Glu Trp
99              165             170             175
102 Val Ile Lys Glu Ser Arg Gly Trp Lys His Ser Val Thr Tyr Ser Cys
103              180             185             190
106 Cys Pro Asp Thr Pro Tyr Leu Asp Ile Thr Tyr His Phe Val Met Gln
107              195             200             205
110 Arg Leu
111              210
114 <210> SEQ ID NO: 3
115 <211> LENGTH: 75
116 <212> TYPE: DNA
117 <213> ORGANISM: Homo sapiens
119 <400> SEQUENCE: 3
120 ggtgacatgg tagatctgcc acgccccagc tgcgtgactt tgggagttcc tttgttttct      60
122 catctgcagg atgag                                     75
125 <210> SEQ ID NO: 4
126 <211> LENGTH: 25
127 <212> TYPE: PRT
128 <213> ORGANISM: Homo sapiens
130 <400> SEQUENCE: 4
132 Gly Asp Met Val Asp Leu Pro Arg Pro Ser Cys Val Thr Leu Gly Val
133 1              5              10              15
136 Pro Leu Phe Ser His Leu Gln Asp Glu
137              20              25
140 <210> SEQ ID NO: 5
141 <211> LENGTH: 705
142 <212> TYPE: DNA
143 <213> ORGANISM: Homo sapiens
145 <400> SEQUENCE: 5
146 tccgaacatg agaccctctt ggtggcaaag ctatttaaag actacagcag cgtggtgcgg      60
148 ccagtggaag accaccgcca ggtcgtggag gtcaccgtgg gcctgcagct gatacagctc      120
150 atcaatgtgg atgaagtaaa tcagatcgtg acaaccaatg tgcgtctgaa acagggtgac      180
152 atggttagatc tgccacgccc cagctgcgtg actttgggag ttctttgtt ttctcatctg      240
154 caggatgagc aatgggtgga ttacaacctt aaatggaatc cagatgacta tggcgggtgtg      300
156 aaaaaaattc acattccttc agaaaagatc tggcgccag accttggtct ctataacgat      360
158 gcagatggtg actttgctat tgtcaagttc accaaagtgc tcctgcagta cactggccac      420
160 atcacgtgga cacctccagc catctttaaa agctactgtg agatcatcgt caccacttt      480

```

RAW SEQUENCE LISTING

DATE: 12/13/2005

PATENT APPLICATION: US/09/820,339B

TIME: 14:01:37

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12132005\I820339B.raw

```

162 ccctttgatg aacagaactg cagcatgaag ctgggcacct ggacctacga cggctctgtc      540
164 gtggccatca acccggaag cgaccagcca gacctgagca acttcatgga gagggggag      600
166 tgggtgatca aggagtcccc gggctggaag cactccgtga cctattcctg ctgccccgac      660
168 accccctacc tggacatcac ctaccacttc gtcatgcagc gcctg      705
171 <210> SEQ ID NO: 6
172 <211> LENGTH: 235
173 <212> TYPE: PRT
174 <213> ORGANISM: Homo sapiens
176 <400> SEQUENCE: 6
178 Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe Lys Asp Tyr Ser
179 1 5 10 15
182 Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val Val Glu Val Thr
183 20 25 30
186 Ala Gly Leu Gln Leu Ile Gln Leu Ile Asn Val Asp Glu Val Asn Gln
187 35 40 45
190 Ile Val Thr Thr Asn Val Arg Leu Lys Gln Gly Asp Met Val Asp Leu
191 50 55 60
194 Pro Arg Pro Ser Cys Val Thr Leu Gly Val Pro Leu Phe Ser His Leu
195 65 70 75 80
198 Gln Asp Glu Gln Trp Val Asp Tyr Asn Leu Lys Trp Asn Pro Asp Asp
199 85 90 95
202 Tyr Gly Gly Val Lys Lys Ile His Ile Pro Ser Glu Lys Ile Trp Arg
203 100 105 110
206 Pro Asp Leu Val Leu Tyr Asn Asn Ala Asp Gly Asp Phe Ala Ile Val
207 115 120 125
210 Lys Phe Thr Lys Val Leu Leu Gln Tyr Thr Gly His Ile Thr Trp Thr
211 130 135 140
214 Pro Pro Ala Ile Phe Lys Ser Tyr Cys Glu Ile Ile Val Thr His Phe
215 145 150 155 160
218 Pro Phe Asp Glu Gln Asn Cys Ser Met Lys Leu Gly Thr Trp Thr Tyr
219 165 170 175
222 Asp Gly Ser Val Val Ala Ile Asn Pro Glu Ser Asp Gln Pro Asp Leu
223 180 185 190
226 Ser Asn Phe Met Glu Ser Gly Glu Trp Val Ile Lys Glu Ser Arg Gly
227 195 200 205
230 Trp Lys His Ser Val Thr Tyr Ser Cys Cys Pro Asp Thr Pro Tyr Leu
231 210 215 220
234 Asp Ile Thr Tyr His Phe Val Met Gln Arg Leu
235 225 230 235
238 <210> SEQ ID NO: 7
239 <211> LENGTH: 690
240 <212> TYPE: DNA
241 <213> ORGANISM: Homo sapiens
243 <400> SEQUENCE: 7
244 tccgaacatg agaccgctct ggtggcaaag ctatttaaag actacagcag cgtgggtgcgg      60
246 ccagtggaag accaccgcca ggtcgtggag gtcaccgtgg gcctgcagct gatacagctc      120
248 atcaatgtgg atgaagtaaa tcagatcggtg acaaccaatg tgcgtctgaa acagggtgac      180
250 atggtagatc tgccacgccc cagctgcgtg actttgggag ttcttttgtt ttctcatctg      240
252 caggatgagc aatgggtgga ttacaacctt aaatggaatc cagatgacta tggcggtgtg      300

```

RAW SEQUENCE LISTING

DATE: 12/13/2005

PATENT APPLICATION: US/09/820,339B

TIME: 14:01:37

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12132005\I820339B.raw

```

254 aaaaaaattc acattccttc agaaaagatc tggcgcccag accttggtct ctataacgat 360
256 gcagatggtg actttgctat tgtcaagttc accaaagtgc tctgcagta cactggccac 420
258 atcacgtgga cacctccagc catctttaaa agctactgtg agatcatcgt caccacttt 480
260 ccctttgatg aacagaactg cagcatgaag ctggggcacct ggacctacga cggctctgtc 540
262 gtggccatca acccggaag cgaccagcca gacctgagca acttcatgga gagcggggag 600
264 tgggtgatca aggagtcccg gggctggaag cactccgtga cctattcctg ctgccccgac 660
266 accccctacc tggacatcac ctaccacttc 690

```

269 <210> SEQ ID NO: 8

270 <211> LENGTH: 230

271 <212> TYPE: PRT

272 <213> ORGANISM: Homo sapiens

274 <400> SEQUENCE: 8

```

276 Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe Lys Asp Tyr Ser
277 1 5 10 15
280 Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val Val Glu Val Thr
281 20 25 30
284 Ala Gly Leu Gln Leu Ile Gln Leu Ile Asn Val Asp Glu Val Asn Gln
285 35 40 45
288 Ile Val Thr Thr Asn Val Arg Leu Lys Gln Gly Asp Met Val Asp Leu
289 50 55 60
292 Pro Arg Pro Ser Cys Val Thr Leu Gly Val Pro Leu Phe Ser His Leu
293 65 70 75 80
296 Gln Asp Glu Gln Trp Val Asp Tyr Asn Leu Lys Trp Asn Pro Asp Asp
297 85 90 95
300 Tyr Gly Gly Val Lys Lys Ile His Ile Pro Ser Glu Lys Ile Trp Arg
301 100 105 110
304 Pro Asp Leu Val Leu Tyr Asn Asn Ala Asp Gly Asp Phe Ala Ile Val
305 115 120 125
308 Lys Phe Thr Lys Val Leu Leu Gln Tyr Thr Gly His Ile Thr Trp Thr
309 130 135 140
312 Pro Pro Ala Ile Phe Lys Ser Tyr Cys Glu Ile Ile Val Thr His Phe
313 145 150 155 160
316 Pro Phe Asp Glu Gln Asn Cys Ser Met Lys Leu Gly Thr Trp Thr Tyr
317 165 170 175
320 Asp Gly Ser Val Ala Ile Asn Pro Glu Ser Asp Gln Pro Asp Leu
321 180 185 190
324 Ser Asn Phe Met Glu Ser Gly Glu Trp Val Ile Lys Glu Ser Arg Gly
325 195 200 205
328 Trp Lys His Ser Val Thr Tyr Ser Cys Cys Pro Asp Thr Pro Tyr Leu
329 210 215 220

```

332 Asp Ile Thr Tyr His Phe

333 225 230

336 <210> SEQ ID NO: 9

337 <211> LENGTH: 20

338 <212> TYPE: DNA

339 <213> ORGANISM: Artificial

341 <220> FEATURE:

342 <223> OTHER INFORMATION: synthetic

344 <400> SEQUENCE: 9

RAW SEQUENCE LISTING

DATE: 12/13/2005

PATENT APPLICATION: US/09/820,339B

TIME: 14:01:37

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12132005\I820339B.raw

```

345 ccggatccga acatgagacc                                20
348 <210> SEQ ID NO: 10
349 <211> LENGTH: 23
350 <212> TYPE: DNA
351 <213> ORGANISM: Artificial
353 <220> FEATURE:
354 <223> OTHER INFORMATION: synthetic
356 <400> SEQUENCE: 10
357 cggaattcca ggcgctgcat gac                                23
360 <210> SEQ ID NO: 11
361 <211> LENGTH: 26
362 <212> TYPE: DNA
363 <213> ORGANISM: Artificial
365 <220> FEATURE:
366 <223> OTHER INFORMATION: synthetic
368 <400> SEQUENCE: 11
369 cggaattctg gaggtgtcca cgtgat                                26
372 <210> SEQ ID NO: 12
373 <211> LENGTH: 23
374 <212> TYPE: DNA
375 <213> ORGANISM: Artificial
377 <220> FEATURE:
378 <223> OTHER INFORMATION: synthetic
380 <400> SEQUENCE: 12
381 ccggatccgc catctttaaa agc                                23
384 <210> SEQ ID NO: 13
385 <211> LENGTH: 25
386 <212> TYPE: DNA
387 <213> ORGANISM: Artificial
389 <220> FEATURE:
390 <223> OTHER INFORMATION: synthetic
392 <400> SEQUENCE: 13
393 ggccatgggc tccgaacatg agacc                                25
396 <210> SEQ ID NO: 14
397 <211> LENGTH: 29
398 <212> TYPE: DNA
399 <213> ORGANISM: Artificial
401 <220> FEATURE:
402 <223> OTHER INFORMATION: synthetic
404 <400> SEQUENCE: 14
405 ccggatcctc aaaagtgrta ggtgatrtc                                29
408 <210> SEQ ID NO: 15
409 <211> LENGTH: 24
410 <212> TYPE: DNA
411 <213> ORGANISM: Artificial
413 <220> FEATURE:
414 <223> OTHER INFORMATION: synthetic
416 <400> SEQUENCE: 15
417 cgctatgggg ctgcttggtg acag                                24

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/13/2005
PATENT APPLICATION: US/09/820,339B TIME: 14:01:38

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\12132005\I820339B.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32

VERIFICATION SUMMARY

DATE: 12/13/2005

PATENT APPLICATION: US/09/820,339B

TIME: 14:01:38

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12132005\I820339B.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date